

# UTILITIES

## DESCRIPTION

The Department of Utilities provides water and wastewater services to the citizens of Chesterfield County and to commercial and industrial customers located within the county. User charges, which are among the lowest in the area, support operation and maintenance, administration, facilities replacement, and debt service. The department's three divisions include Development, Finance and Administration, and Operations and Maintenance. The Development division implements the Water and Wastewater Facilities Plan that assures capacity is available to support residential and economic development as well as property management for

county capital needs. The Finance and Administration division responds to new requests for service, renders bills in a timely and accurate manner, provides excellent customer service, and maintains a sound financial structure. The Operations and Maintenance division is responsible for treating and delivering safe, high-quality drinking water and for collecting and treating wastewater from households and industries in Chesterfield County. Services provided are consistent with all federal, state, and county regulations.

## FINANCIAL ACTIVITY

### Utilities - Total Department

	<b>FY2002 Actual</b>	<b>FY2003 Adopted</b>	<b>FY2004 Biennial Planned</b>	<b>Change FY2004 Adopted</b>	<b>FY2003 to FY2004</b>	<b>FY2005 Projected</b>	<b>FY2006 Projected</b>	<b>FY2007 Projected</b>
<b>Water</b>	\$20,820,872	\$22,282,000	\$22,169,600	\$23,249,400	4.3%	\$23,244,400	\$23,247,300	\$23,250,000
<b>Wastewater</b>	20,622,678	21,192,700	20,964,900	21,761,300	2.7%	21,746,300	21,752,300	21,757,600
<b>CIP-Water</b>	4,996,284	10,230,000	10,812,000	11,327,000	10.7%	15,775,000	12,432,000	8,585,000
<b>CIP-Wastewater</b>	3,712,607	19,650,000	6,900,000	10,375,000	-47.2%	23,440,000	4,525,000	4,050,000
<b>Added to reserves</b>	<u>13,897,608</u>	<u>0</u>	<u>3,433,200</u>	<u>364,200</u>	0.0%	<u>0</u>	<u>5,440,000</u>	<u>11,775,900</u>
<b>Total</b>	\$64,050,049	\$73,354,700	\$64,279,700	\$67,076,900	-8.6%	\$84,205,700	\$67,396,600	\$69,418,500
<b>Revenue</b>	64,050,049	58,611,800	64,279,700	63,527,800	8.4%	65,433,600	67,396,600	69,418,500
<b>Used from reserves</b>	<u>0</u>	<u>14,742,900</u>	<u>0</u>	<u>3,549,100</u>	-75.9%	<u>18,772,100</u>	<u>0</u>	<u>0</u>
<b>Net Cost</b>	\$64,050,049	\$73,354,700	\$64,279,700	\$67,076,900	-67.5%	\$84,205,700	\$67,396,600	\$69,418,500
<b>FT Pos.</b>	278	281	281	281	0	281	281	281

# UTILITIES

## Utilities - Water

	<b>FY2002</b>	<b>FY2003</b>	<b>FY2004</b>		<b>Change</b>			
	<b>Actual</b>	<b>Adopted</b>	<b>Biennial</b>	<b>FY2004</b>	<b>FY2003 to</b>	<b>FY2005</b>	<b>FY2006</b>	<b>FY2007</b>
			<b>Planned</b>	<b>Adopted</b>	<b>FY2004</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
<b>Personnel</b>	\$6,524,932	\$6,660,400	\$6,660,400	\$6,825,000	2.5%	\$6,825,000	\$6,825,000	\$6,825,000
<b>Operating</b>	10,607,170	12,227,400	12,227,400	12,859,200	5.2%	12,859,200	12,859,200	12,859,200
<b>Capital</b>	890,967	679,200	589,400	939,000	38.3%	939,000	939,000	939,000
<b>Debt Service</b>	2,797,803	2,715,000	2,692,400	2,626,200	-3.3%	2,621,200	2,624,100	2,626,800
<b>CIP</b>	<u>4,996,284</u>	<u>10,230,000</u>	<u>10,812,000</u>	<u>11,327,000</u>	10.7%	<u>15,775,000</u>	<u>12,432,000</u>	<u>8,585,000</u>
<b>Total</b>	\$25,817,156	\$32,512,000	\$32,981,600	\$34,576,400	6.3%	\$39,019,400	\$35,679,300	\$31,835,000
<b>Revenue</b>	<u>34,329,540</u>	<u>31,345,700</u>	<u>34,342,300</u>	<u>34,940,600</u>	11.5%	<u>35,988,800</u>	<u>37,068,500</u>	<u>38,180,600</u>
<b>To (From) Reserve</b>	\$8,512,384	(\$1,166,300)	\$1,360,700	\$364,200	-131.2%	(\$3,030,600)	\$1,389,200	\$6,345,600

## Utilities - Wastewater

	<b>FY2002</b>	<b>FY2003</b>	<b>FY2004</b>		<b>Change</b>			
	<b>Actual</b>	<b>Adopted</b>	<b>Biennial</b>	<b>FY2004</b>	<b>FY2003 to</b>	<b>FY2005</b>	<b>FY2006</b>	<b>FY2007</b>
			<b>Planned</b>	<b>Adopted</b>	<b>FY2004</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
<b>Personnel</b>	\$5,675,469	\$6,333,200	\$6,333,200	\$6,492,300	2.5%	\$6,492,300	\$6,492,300	\$6,492,300
<b>Operating</b>	8,494,653	8,603,400	8,603,400	8,824,900	2.6%	8,824,900	8,824,900	8,824,900
<b>Capital</b>	847,894	813,200	635,400	1,178,900	45.0%	1,178,900	1,178,900	1,178,900
<b>Debt Service</b>	5,604,662	5,442,900	5,392,900	5,265,200	-3.3%	5,250,200	5,256,200	5,261,500
<b>CIP</b>	<u>3,712,607</u>	<u>19,650,000</u>	<u>6,900,000</u>	<u>10,375,000</u>	-47.2%	<u>23,440,000</u>	<u>4,525,000</u>	<u>4,050,000</u>
<b>Total</b>	\$24,335,285	\$40,842,700	\$27,864,900	\$32,136,300	-21.3%	\$45,186,300	\$26,277,300	\$25,807,600
<b>Revenue</b>	<u>29,720,509</u>	<u>27,266,100</u>	<u>29,937,400</u>	<u>28,587,200</u>	4.8%	<u>29,444,800</u>	<u>30,328,100</u>	<u>31,237,900</u>
<b>To (From) Reserve</b>	\$5,385,224	(\$13,576,600)	\$2,072,500	(\$3,549,100)	-73.9%	(\$15,741,500)	\$4,050,800	\$5,430,300

## BUDGET ANALYSIS AND EVALUATION

The Utilities Department will continue to place emphasis on maintaining a strong financial position while at the same time keeping rates competitive with other utilities in the region. Business practices designed to ensure all revenue earned is received will be balanced with good customer service principles. Continued funding of the rate

stabilization reserve will allow replacement of aging infrastructure to assure water and wastewater systems that provide reliable service and protect the environment.

The operating budget reflects increases in water purchases from the City of Richmond and

## ***UTILITIES***

Appomattox River Water Authority and electrical costs in both water and wastewater operations due to anticipated growth and demand. The budget also indicates increases in capital costs due to the needed replacement of worn out equipment. To enhance our customer service operations, dollars have been budgeted for an Interactive Voice Response (IVR) system.

To address the increased workload within the department without increasing staff, existing employees must assume additional responsibilities and efficiency must be enhanced through the use of technology. Use of technology will require staff to acquire additional knowledge and skills. As a result, six reclassifications are included in the budget. Training continues to be a priority throughout the department and the operating budget provides funding to assure staff is provided with the skills necessary to provide excellent customer service and maintain educational requirements.

The normal costs associated with an expanding new customer base, inflation, and a salary adjustment for staff increase the water and wastewater operating budgets by only 4.3% and 2.7% respectively.

The Capital Improvement Program is a detail of a planned ten-year analysis of basic needs to expand and replace the utility infrastructure. The combination of growth, replacement, and changes in use patterns with attention to the environment and concerns of our customers makes the Capital Improvement Program a necessity in continuing to keep Chesterfield a FIRST CHOICE community.

Included in the Capital Improvement Program is \$10,000,000 for treatment plant improvements from the City of Richmond and extensive water improvements from the Appomattox River Water Authority to meet future water demand. On the wastewater side, \$16,800,000 is included for treatment plant improvements to address Chesapeake Bay Act initiatives related to reducing nutrient loading to the Bay and its tributaries. This project will, on a continual basis, reduce levels of nutrients (nitrogen) discharged at our treatment plant and will position the department for compliance with the Bay Act in the future. The Capital Improvement Program also includes \$2,000,000 to support funding of the county enterprise resource planning system.

To offset these additional capital expenses a small increase in commodity charges is necessary, specifically seven cents in water and six cents in wastewater. However, when compared to the neighboring jurisdictions of Hanover and Henrico Counties and the City of Richmond, Chesterfield County rates are still by far the lowest in the area. Our average customer bimonthly bill will increase by only \$2.34 or 3.6%, the first increase since FY1999.

In FY2001, the Board of Supervisors approved a \$1000 increase in the capital cost recovery charge to fund the Appomattox River Water authority. The increase was divided over a four-year period. This budget includes the fourth year's increase of \$250.

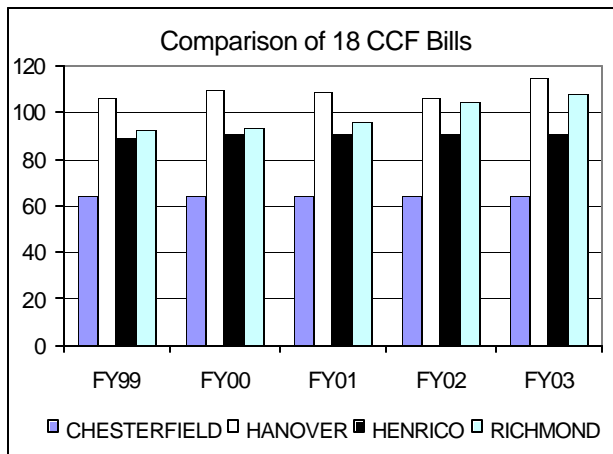
# UTILITIES

## HOW ARE WE DOING?

**Goal:** Ensure the financial integrity of the department and efficiently allocate resources. Supports countywide strategic goal number 1

**Objective:** Promote financial integrity

**Measure:** Benchmark average customer bi-monthly bill



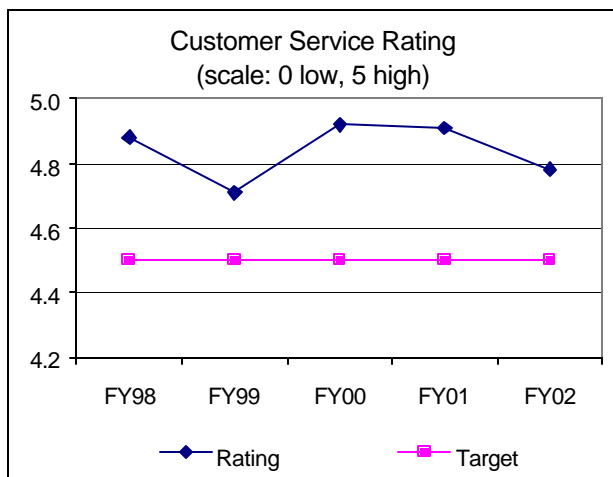
### Initiatives

- Annual rate study
- Rate stabilization reserve
- Ten year financial planning
- Monthly budget expenditure analysis

**Goal:** To provide world-class customer service. Supports countywide strategic goal number 2

**Objective:** Strive to establish a courteous and respectful partnership with our customers

**Measure:** Customer quality of service rating



### Initiatives

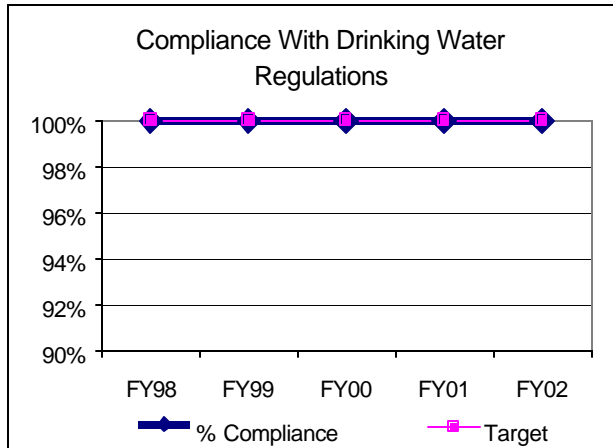
- Monitor customer service related calls for quality assurance
- Conduct telephone survey
- Issue customer service satisfaction questionnaire

# UTILITIES

**Goal:** Provide water and wastewater service that is safe, reliable, and environmentally sound.  
Supports countywide strategic goals numbers 3 and 8

**Objective:** To operate utility facilities as effectively as possible

**Measure:** Percent compliance with drinking water regulations



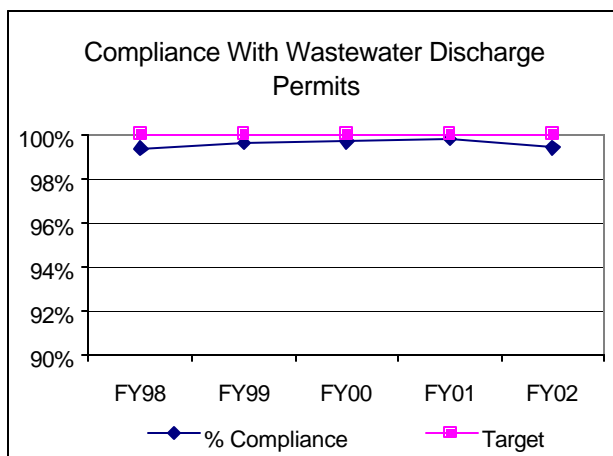
## Initiatives

- Distribution system special survey monitoring program
- Bacteriological testing for new construction
- Annual flushing program
- Corrosion protection processes
- Evaluation and modification for best available technologies
- Setting treatment standards to exceed regulatory requirements
- Reservoir monitoring program

**Goal:** Provide water and wastewater service that is safe, reliable, and environmentally sound.  
Supports countywide strategic goals numbers 3 and 8

**Objective:** To operate utility facilities as effectively as possible

**Measure:** Percent of compliance with wastewater discharge permits



## Initiatives

- Computerized preventive maintenance program
- Quality assurance/quality control process for sampling/testing protocols
- Supervisory Control and Data Acquisition (SCADA)
- Random sampling program for waste haulers
- Industrial waste pretreatment program
- Outsourcing biosolids disposal
- Outsourcing instrumentation maintenance

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## **WHERE ARE WE GOING?**

The department continues to experience a high rate of customer growth, which will require construction of new water and wastewater facilities and additional resources to operate those facilities and to maintain a high level of customer service. Regulations being developed at the state and federal levels, while necessary to protect the environment and to assure quality drinking water, will require significant capital improvements at water and wastewater treatment facilities. The higher level of treatment provided will result in higher operational costs. Nutrient removal facilities proposed in the Capital Improvement Program will allow the department to continue to be exemplary stewards of the environment by addressing Chesapeake Bay Act requirements in a timely, well-planned manner.

The department is in the process of evaluating the current rate structure. A cost of service evaluation is being conducted to assure that user charges are applied to recover costs appropriately from the various customer classes. A major focus of the study is to evaluate the increasing impact of lawn and garden irrigation on capital costs.

Methods for receiving input from customers related to the quality of service will continue to be expanded to assure customer needs are addressed. Advances in technology will be monitored and implemented when appropriate to increase efficiency and enhance customer service. New systems must be developed to provide customers with Internet access to account information and payment options.